

## ABSTRACT:

The invention relates to a multi-standard digital receiver, in a digital video transmission system. It comprises a channel decoder for protecting a transmitted signal against channel transmission errors, the channel decoder comprising:

- a set of co-processors including at least 3 clusters of programmable co-processors for executing the functions of a digital front-end block (DFE), a channel correction block (CHN) and a forward error correction block (FEC), respectively,
- a general purpose processor (DSP) for managing control, synchronization and configuration of the channel decoder, and
- a memory (SM) shared between the clusters and the general purpose processor.

Fig. 8